

1 / 16

[illegible]

5' GTCGAGGATCCCTAAAGTCCCTTTGAAGCTTTCCCTTACA -900

GTGAGATGGGATCCAGTATTTATTGAGTTTCCTCATTAATAATGGGGATAATAATAGTAAATGAGTGATCTC -825

GGCCTAAGACAGTGGAATAGTGGCTGGACAGATAAGCCTCGGTAATGGTAGCCAATAATGATAGAGTATGCTG -750

TAAGATAGTCTTTTCTCTCCTCTCGTTCTCAACAAGTCTCTAATCAATTATTCACTTTATAACAGGAATAGAACTA -675

AGACATTAGCACTTTCCAAAGGTCCCTAGCAAGTAATGGAGAGACCCCTATGACCAGGATGAAGCAAGAAATTCCC -600

ATAAGAGGACTCATTTCCAACTCATATCTTGTAAGAGTTCCCAATGCCAGCTCAGATCAACTGCCCTCAATTTA -525

CAGTGTGAGTGTGCTACCTCCTTTGGGACTGTATATCCAGAGGACCCCTCCTCAATAAAACACTTTATAAATAA -450

CATCCTTCCATGGATGAGGGAAGGAGGTAAGATCTGTAAATGAATAAGCAGGAACCTTTGAAGACTCAGTGACTCA -375

GTGAGTAATAAAGACTCAGTGACTTCTGTATCCTGTCTTAAGTCCCACTCCTTTGGTTTGTCTCCCAAGAAAGCGGT -300

TCCTGCTCTCTCTGAGAGGACCCCTTCCCTGGAAAGGTAAACTAAGGATGTCACGAGAGAAATTTTCCACCATTG -225

GTGCTTGGTCAAGAGGAAACTGATGAGCTGACTCTAGATGTGTGTGTCAGTGAGCGAGAGACAGAGACTCGAAT -150

TTCCGGAGGCTATTTTCAGTTTTTCTTTTCCGTTTTTGTGCAATTTCACTTATGATACCGGCCAATGCTTGGTTGCT -75

ATTTTGGAAACTCCCCCTTAGGGGATGCCCTCAACTGCCCTATAAAGGGCCGCTGAGCTGCAGAGGATTCCTGC 1

AGAGGATCAAGACAGCACGTGGACCTCGCACAGCCTCTCCACAGGTACCATG +75

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AGAAGGCCTTACAGTGAGATGGGATCCCAGTATTTATTGAGTTTCCTCATTCATAAAATG -848
 RA1 →
 GGGATAATAATAGTAAATGAGTTGACACGCGCTAAGACAGTGGAATAGTGGCTGGCACAG -788
 ATAAGCCCTCGGTAAATGGTAGCCAATAATGATAGAGTATGCTGTAAGATATCTTTCTCT -728
 CCCTCTGCTTCTCAACAAGTCTCTAATCAATTATTCCACTTTATAAACAAGGAAATAGAA -668
 CTCAAAGACATTAAGCACTTTTCCCAAAGGTCGCTTAGCAAGTAAATGGGAGAGACCCTA -608
 *
 TGACCAGGATGAAAGCAAGAAATTCCCACAAGAGGACTCATTCCAACATCATATCTTGTGA -548
 AAAGGTTCCCAATGCCAGCTCAGATCAACTGCCTCAATTTACAGTGTGAGTGTGCTCAC -488
 CTCCTTTGGGGACTGTATATCCAGAGGACCCTCCTCAATAAAACACTTTATAAATAACAT -428
 RA2F →
 A
 CCTTCCATGGATGAGGGAAAGGAGGTAAGATCTGTAATGAATAAGCAGGAACTTTGAAGA -368
 -403
 CTCAGTGACTCAGTGAGTAATAAAGACTCAGTGACTTCTGATCCTGTCCTAACTGCCACT -308
 ← RA2R
 CCTTGTTGTCCCCAAGAAAGCGGCTTCCTGCTCTCTGAGGAGGACCCCTTCCCTGGAAGG -248
 *
 TAAAACTAAGGATGTCAGCAGAGAAATTTTCCACCATTGGTGCTTGGTCAAAGAGGAAA -188
 CTGATGAGCTACTCTAGATGAGAGAGCAGTGAGGGAGAGACAGAGACTCGAATTTCCGG -128
 SacI
 AGGCTATTTCAGTTTTCTTTCCGTTTTGTGCAATTTCACTTATGATACCGGCCAATGCT -68
 * NF IL-6 CCAAT
 TGGTTGCTATTTTGGAAACTCCCCTTAGGGGATGCCCTCAACTGGCCCTATAAAGGGCC -8
 NFkB NFkB -28 TATA
 ▼ Start of transcription
 AGCCTGAGCTGCAGAGGATTCCTGCAGAGGATCAAGACAGCACGTGGACCTCGCACAGCC 53
 1 *****
 TCTCCACAGGTACCATGAAGGTCTCCGCGGCAGCCCTCGCTGTCATCCTCATTGCTACT 113
 KpnI ← RA3
 GCCCTCTGCGC 124

FIG. 2

1970-1971		1971-1972		1972-1973		1973-1974		1974-1975		1975-1976		1976-1977		1977-1978		1978-1979		1979-1980		1980-1981		1981-1982		1982-1983		1983-1984		1984-1985		1985-1986		1986-1987		1987-1988		1988-1989		1989-1990		1990-1991		1991-1992		1992-1993		1993-1994		1994-1995		1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197	
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new	-----	-----AGAAGG 6
old	GTCGAGGATCCCTAAAGTCCTTTGAAGCTTTCATATTCTGTAAC	TTTGTCCCAAGAAG 60

new
old

```

CCTTACAGTGAGATGGGATCCCAGTATTTATTGAGTTTCCTCATTAATAATGGGATA 66
CCTTACAGTGAGATGGGATCCCAGTATTTATTGAGTTTCCTCATTAATAATGGGATA 120
*****

```

new
old

ATAATAGTAAATGAGTTGACACGCCGCTAAGACAGTGGAATAGTGGCTGGCACAGATAAGC	126
ATAATAGTAAATGAGTTGACACGCCGCTAAGACAGTGGAATAGTGGCTGGCACAGATAAGC	180

new
old

new
old

new	GACATTAAGCACTTTCCCAAAGGTCGCTTAGCAAGTAAATGGAGAGACCCCTATGACCA	306
old	GACATTAAGCACTTTCC-AAAGGTCGCTTAGCAAGTAAATGGAGAGACCCCTATGACCA	359

FIG. 3(a)

new	GGATGAAAGCAAGAAATCCCAAGAGGAGTCAATCCAACTCATATCTTGTGAAAAGGT	366
old	GGATGAAAGCAAGAAATCCCAAGAGGAGTCAATCCAACTCATATCTTGTGAAAAGGT	419

new	TCCCAATGCCAGCTCAGATCAACTGCCTCAATTACAGTGTGAGTGTGCTCACCTCCTT	426
old	TCCCAATGCCAGCTCAGATCAACTGCCTCAATTACAGTGTGAGTGTGCTCACCTCCTT	479

new	TGGGGACTGTATATCCAGAGGACCCCTCCTCAATAAAACACTTTATAATAACATCCTTCC	486
old	TGGGGACTGTATATCCAGAGGACCCCTCCTCAATAAAACACTTTATAATAACATCCTTCC	539

new	ATGGATGAGGGAAGGAGATAAGATCTGTAATGAATAAGCAGGAACCTTGAAGACTCAGT	546
old	ATGGATGAGGGAAGGAGATAAGATCTGTAATGAATAAGCAGGAACCTTGAAGACTCAGT	599

new	GACTCAGTGAGTAATAAGACTCAGTGACTTCTGATCCTGTCTTAAGTCCACTCCTTGT	606
old	GACTCAGTGAGTAATAAGACTCAGTGACTTCTGATCCTGTCTTAAGTCCACTCCTTGT	659

new	TGTCCCAAGAAAGCGGCTTCCTGCTCTCTGAGGAGGACCCCTTCCCTGGAAGTAAAC	666
old	TGTCCCAAGAAAGCGGCTTCCTGCTCTCTGAGGAGGACCCCTTCCCTGGAAGTAAAC	718

new	TAAGGATGTCAGCAGAGAAATTTTCCACCATTGGTGCTTGGTCAAAGAGGAACTGATG	726
old	TAAGGATGTCAGCAGAGAAATTTTCCACCATTGGTGCTTGGTCAAAGAGGAACTGATG	778

FIG. 3(b) (cont'd)

new	AGCTCACTCTAGATGAGAGAGCAGTGAGGGAGAGACAGAGACTCGAATTTCGGAGGCTA	786
old	AGCTCACTCTAGATGAGAGAGCAGTGAGGGAGAGACAGAGACTCGAATTTCGGAG-CTA	837
	*****	***
new	TTTCAGTTTCTTTTCCGTTTGTGCAATTTCACCTTATGATACCGGCCAATGCTTGGTTG	846
old	TTTCAGTTTCTTTTCCGTTTGTGCAATTTCACCTTATGATACCGGCCAATGCTTGGTTG	897
	*****	*****
new	CTATTTGGAAACTCCCTTAGGGGATGCCCTGAACCTGGCCCTATAAAGGCCAGCCTG	906
old	CTATTTGGAAACTCCCTTAGGGGATGCCCTGAACCTGGCCCTATAAAGGCCAGCCTG	957
	*****	*****
new	AGCTGCAGAGGATTCCCTGCAGAGGATCAAGACAGCACCGTGGACCTCGCACAGCCTCTCCC	966
old	AGCTGCAGAGGAT-----CAAGACAGCACCGTGGACCTCGCACAGCCTCTCCC	1004
	*****	*****
new	ACAGGTACCATGAAGGTCCTCCGGCGCAGCCCTCGCTGTCATCCTCATTTGCTACTGCCCTC	1026
old	ACAGGTACCATG-----	1016

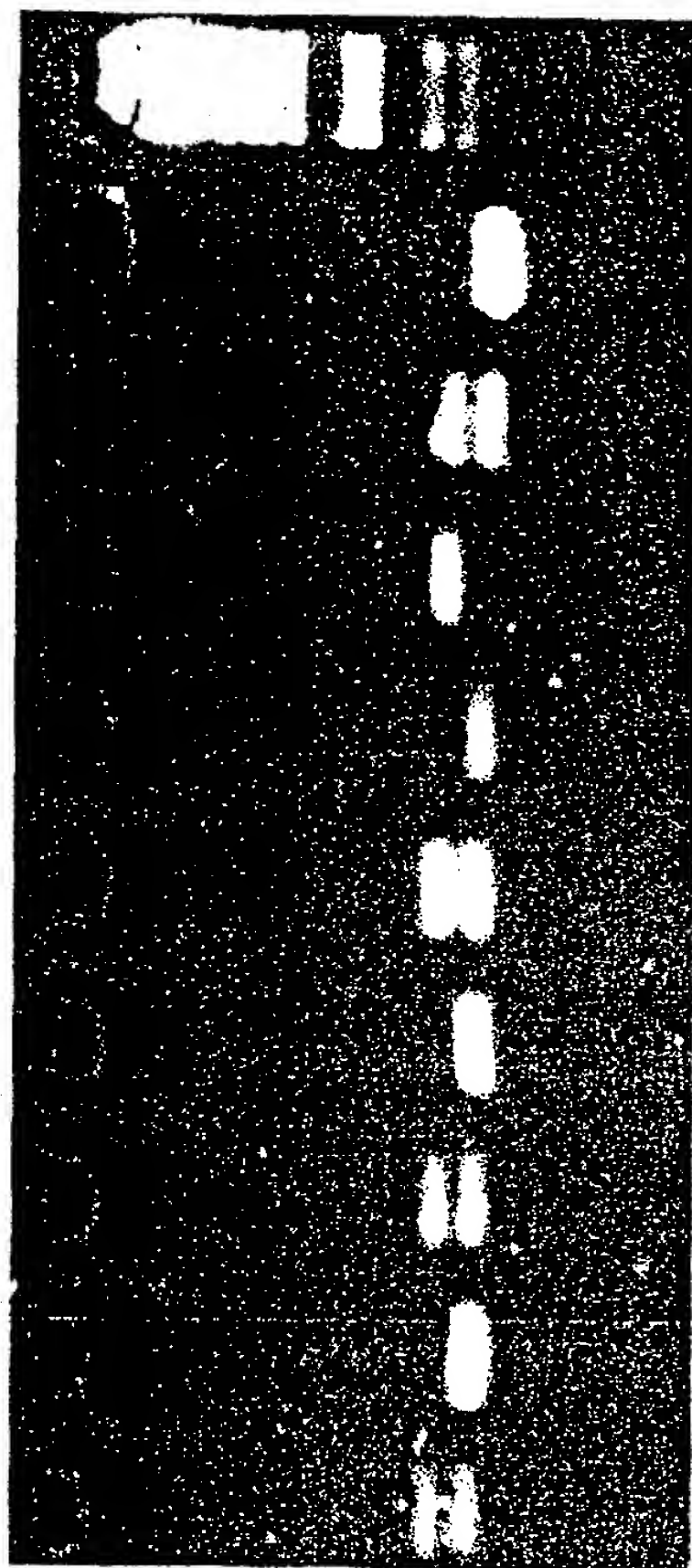
new	TGCCG 1031	
old	----	

FIG. 3(c) (cont'd)

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RANTES gene promoter polymorphism RFLP analysis

1 2 3 4 5 6 7 8 9



Mutant

135 bp

Wild type

112bp

Lanes 2, 4, 6, & are homozygote wild types

Lane 7 is homozygote mutant

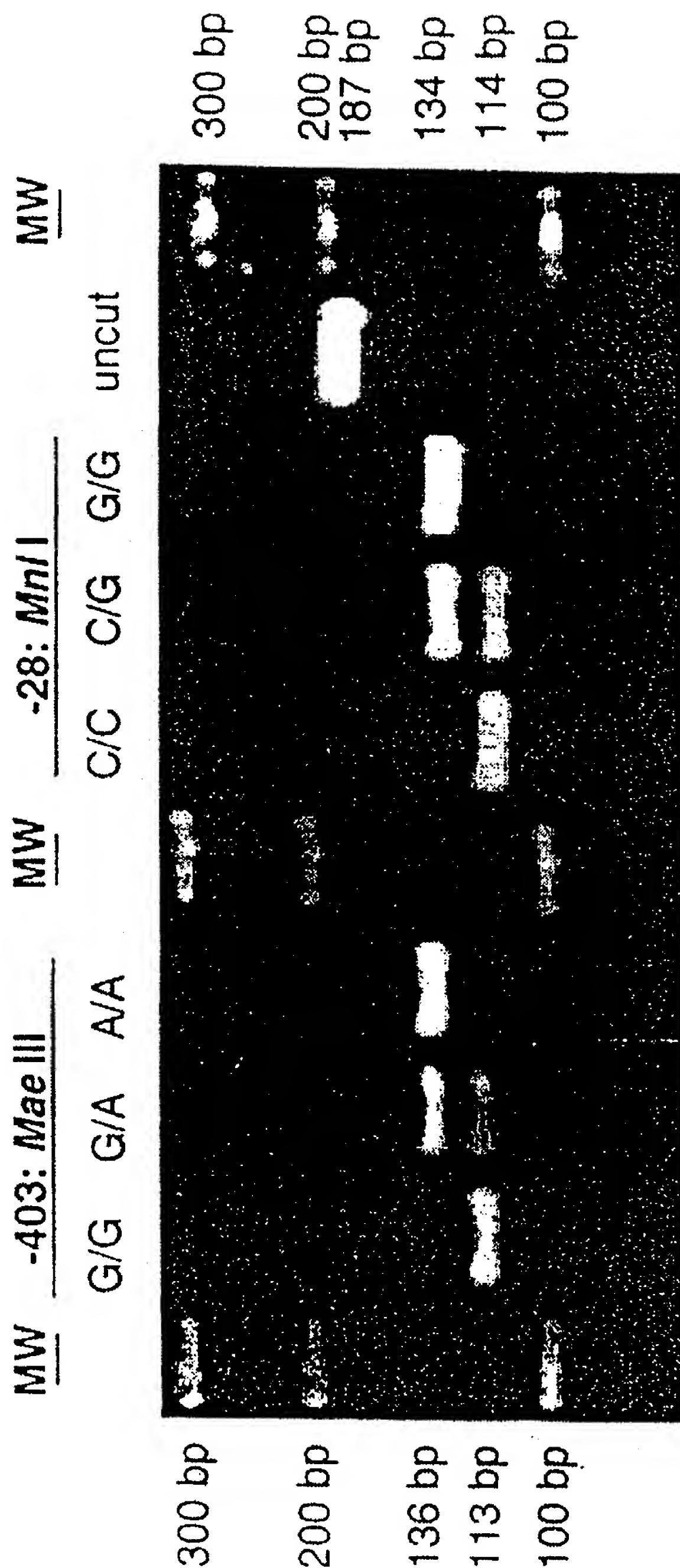
Lanes 1, 3, 5 & 8 are heterozygotes

FIG. 4

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Group	GG	GA	AA	G	A
non-atopic/non-asthmatic	14 (0.61)	9 (0.39)	0 (0.00)	37 (0.80)	9 (0.20)
Atopic/non-asthmatic	37 (0.53)	30 (0.43)	3 (0.04)	104 (0.74)	36 (0.26)
Asthmatic/non-atopic	3 (0.43)	3 (0.43)	1 (0.14)	9 (0.64)	5 (0.36)
Atopic and asthmatic	19 (0.48)	16 (0.40)	5 (0.12)	54 (0.68)	26 (0.32)
Haemophiliacs HIV +	63 (0.69)	22 (0.24)	6 (0.07)	148 (0.81)	34 (.19)
Haemophiliacs HIV -	9 (0.69)	4 (0.31)	0 (0)	22 (0.85)	4 (0.15)
HIV exposed-uninfected	10 (0.48)	7 (0.33)	4 (0.19)*	31 (0.74)	11 (0.26)
Controls	66 (0.73)	19 (0.21)	5 (0.06)	151 (0.84)	29 (0.16)

561

[illegible]

165

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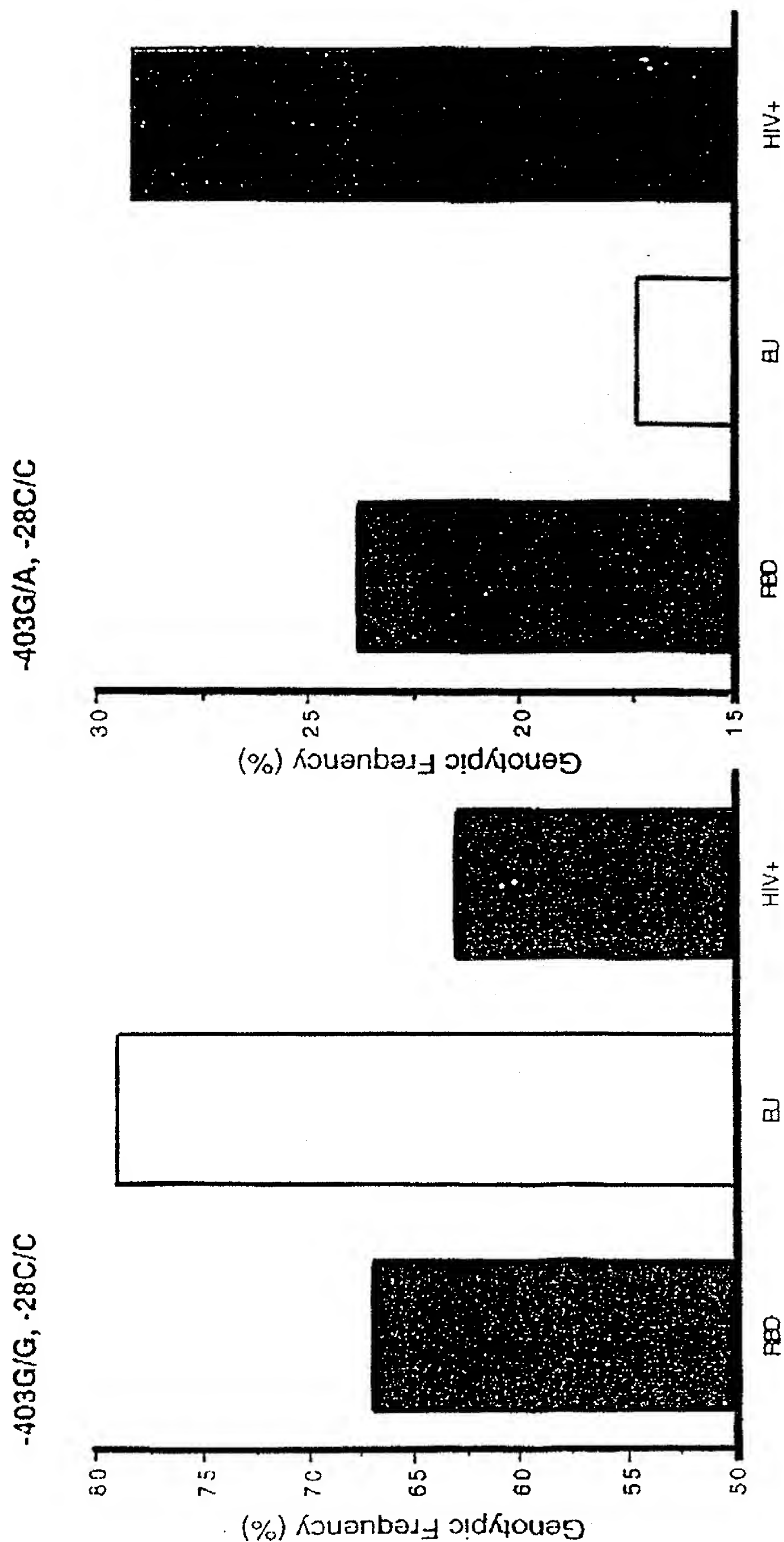


FIG. 7

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Proportion Free of AIDS after Seroconversion
by RANTES Genotype

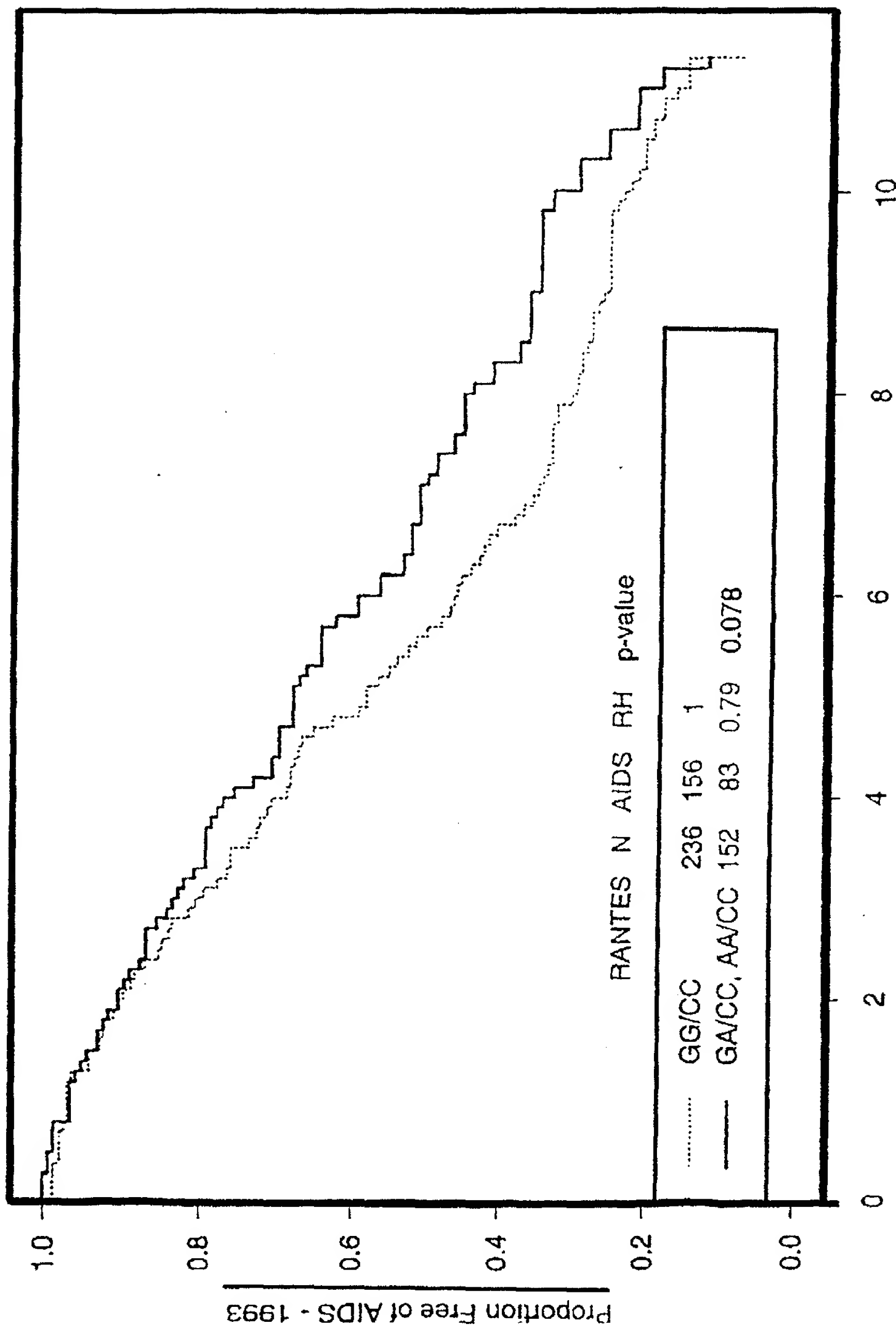


FIG. 8

Time from Seroconversion (Years)